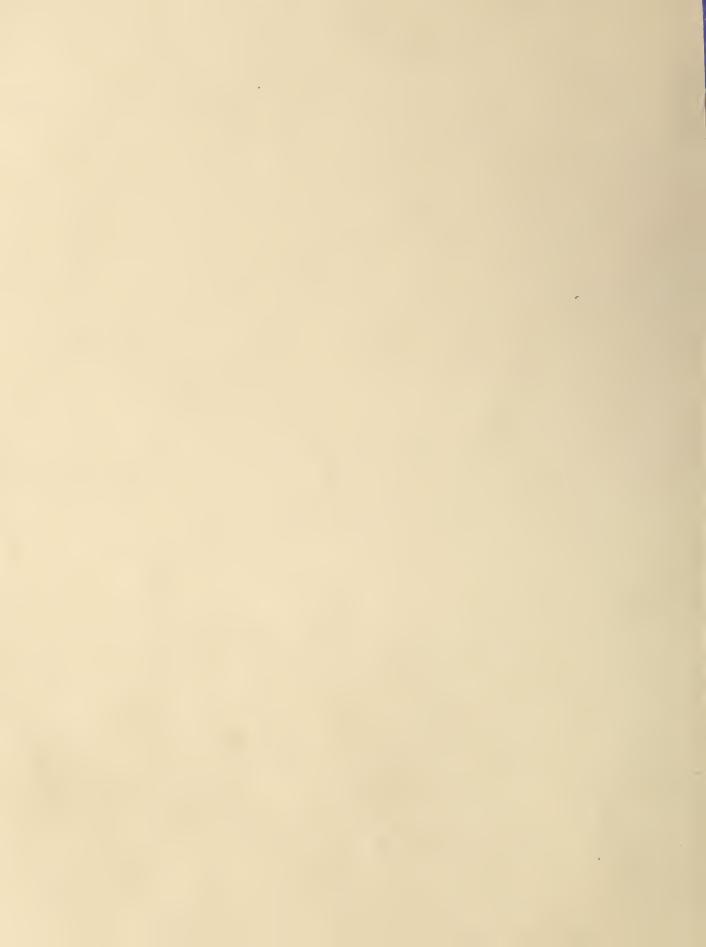
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Do not assume content reflects current scientific knowledge, policies, or practices.





WATER SUPPLY OUTLOOK

rederal - State - Private Cooperative Snow Surveys

for

COLORADO and NEW MEXICO

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE and

COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

MAR. 1, 1966

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas Λ total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEBMAY) P	ORTLAND, OREGON	ALL COOPERATORS
BASIC DATA SUMMARY	OCTOBER 1 F	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR. · MAY)	PALMER. ALASKA	ALASKA S.C.D.
AR I ZON A	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	_ MONTHLY (FEBMAY)	FORT COLLINS, COLORADO.	- COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IOAHO	MONTHLY (JANJUNE)	BOISE, IDAHO	_ IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JANJUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NE VADA	MONTHLY (JANMAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
ORE GON	(anut nat) YJHTNOM	PORTLAND, OREGON	OREGO STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JANJUNE)	SALT LAKE CITY, UTAH	. UTAH STATE ENGINEER
WASHINGTON-	MONTHLY (FEBJUNE)_	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEBJune)	CASPER, WYOMING	WYOMING STATE ENGINEER
	PUBLISHED BY	OTHER AGENCIES	
REPORTS	ISSUED		AGENCY
BRITISH COLUMBIA	MONTHLY (FEBJUNE)		s SERVICE, DEPT. OF LANDS, RESOURCES, PARLIAMENT BLDG., CANADA
CALIFORNIA	MONTHLY (FEBMAY)	CALIF. DEPT. OF V	WATER RESOURCES, P.O. BOX 388, F.

FEDERAL-STATE COOPERATIVE SNOW SURVEYS AND WATER SUPPLY FORECASTS for

COLORADO RIVER, PLATTE RIVER ARKANSAS RIVER AND RIO GRANDE DRAINAGE BASINS

issued

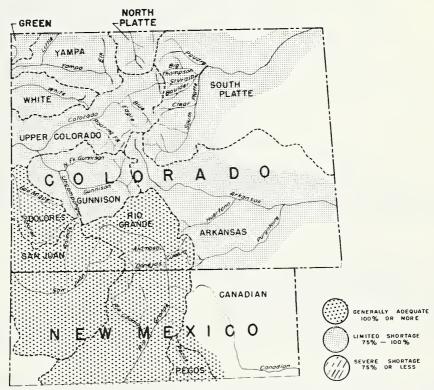
March 1, 1966

Report Prepared By
Jack N. Washichek, Snow Survey Supervisor
and
Don W. McAndrew, Assistant Snow Survey Supervisor
Fort Collins, Colorado

United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado

State Engineer of Colorado
Denver, Colorado
and
State Engineer of New Mexico
Santa Fe. New Mexico

WATER SUPPLY OUTLOOK



THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAMFLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.

GENERAL SERIES PAPER 829

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO as of

March 1, 1966

State this summer. The Southern part of the State is the only area with above normal snow pack. Reservoir carry-over storage is excellent and will be a valuable supplement in case of deficient runoff. There is still a little while in which the snow could build up, but time is getting short.

Soils are in good condition both in the mountains and in the irrigated areas. Several large storms would help the water supply outlook materially.

MEXICO-Even though all areas of the State have slightly better than average snow packs, more snow is needed to insure adequate water supplies this summer. The main stem of the Rio Grande should flow about 130% of normal with most other smaller streams flowing between normal and 125% of normal.

Reservoir carry-over storage is much improved over a year ago and just slightly above normal.

The Pecos should have adequate supplies as well as the Canadian. Storage in Conchas is much improved over last year and slightly better than normal.

The San Juan River should flow better than normal.

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WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I

SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts,

WATERSHED II

ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III

RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts,

WATERSHED IV

RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallectics, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Englewood Soil Conservation Districts.

WATERSHED V

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

WATERSHED VI

GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahere Soil Conservation Districts.

WATERSHED VII

COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII

YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX

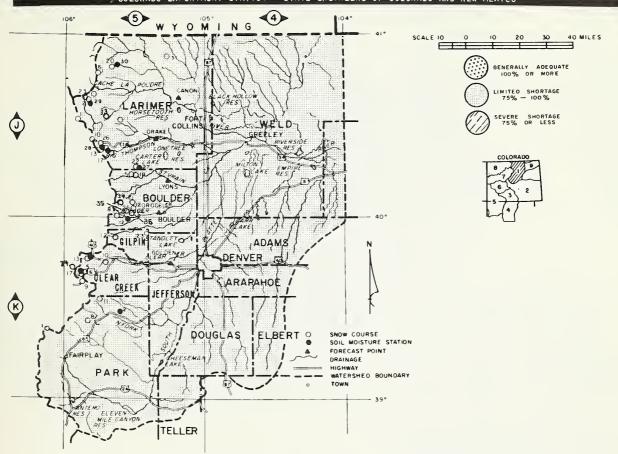
LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton Peetz, Padroni, Morgan, Rock Creek and Yuma Soil Conservation Districts.

SOUTH PLATTE RIVER WATERSHED IN COLORADO as of

March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The South Platte and its' tributaries are far behind on their high elevation snow pack. Current snow readings indicate the snow 1s only 53% of last year and only 65% of the 1948-62 normal. There are a couple of months left in which to bring the snow pack up to normal, but it is doubtful if it will reach normal levels.

The total water supply outlook is not quite so bad, primarily due to the above average carry-over storage.

Irrigated areas that have reservoir storage to back up the summer runoff should have a near normal water supply, while farms relying on river runs will have short water supplies.

Soils in the mountains are wet, which should increase the runoff slightly.

Forecasts are based on average precipitation for the remainder of the year. Saint Vrain is forecasted the lowest of the tributary streams, and is 69% of average. Clear Creek should flow the highest at 85%.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

SNOW		CURRE	NT INFORM	ATION	PAST I	RECORD
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DE PTH (INCHES)	WATER CONTENT (INCHES)	WATER C (INC)	HES)
South Platte River & Tributaries Baltimore Berthoud Falls Big South Boulder Falls Cameron Pass (A) Chambers Lake Copeland Lake Deadman Hill (A) Deer Ridge Empire Geneva Park Grizzly Peak (B) Hidden Valley Hoosier Pass Hour Glass Lake Jefferson Creek Lake Irene (B) Long's Peak Lost Lake Loveland Lift No. 1 Loveland Pass Pine Creek Red Feather Two Mile University Camp Ward Wild Basin	5K23 5K13 5J3 5J25 5J1 5J2 5J17 5K10 5K11 5J11 5K11 5J11 5K24 5J5 5J23 5K24 5J5 5J10 5J26 5J26 5J31 5J26 5J31 5J27 5J31 5J31 5J31 5J31 5J31 5J31 5J31 5J31	2/28 2/28 2/26 2/27 2/24 2/25 2/23 2/24 2/28 2/28 2/28 2/28 2/25 2/25 2/25 2/25	16 35 7 27 48 17 10 46 13 27 10 37 26 29 17 25 55 28 24 53 36 6 15 33 34 15 35	6.5 9.2 1.3 7.4 15.2 4.3 2.4 12.0 3.4 4.6 2.1 8.8 5.9 5.6 3.3 16.5 6.1 5.9 13.8 8.7 2.9 7.6	6.5 15.0 3.7 14.5 20.5 10.2 5.6 15.2 5.0 7.4 6.3 19.4 10.0 17.7 11.3 24.0 12.5 12.2 15.9 23.5 2.0 6.6 14.5 19.4 7.1	13.0* 2.5 9.9* 19.2 7.8 4.5* 12.9 4.7* 15.0 9.4 11.1 6.0 9.8* 10.8* 12.6 17.6 5.4* 11.9

NOTE: • - 1948-62 (adjusted averages) NS - NO SURVEY (A) - AIR OBSERVED (B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Don W. McAndrew Soil Conservation Service Colorado State University Fort Collins, Colorado

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPT STREAM AND STATION	ORECAST APRIL -	THIS YEAR % VERAGE	AVERAGE 1948-62
Big Thompson at Drake (2) Boulder at Orodell Cache La Poudre at Canon	90 44	81 81	110 54
Mouth (1) Clear Creek at Golden (3) Saint Vrain at Lyons	200 115 55	81 85 69	246 134 80

- Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- (2) Observed flow plus by-pass to power plants.
- (3) Observed flow minus diversions through Jones Pass.

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SOIL CONSERVATION SERVICE

Snow Survey Colorado State University Fort Collins, Colorado

OFFICIAL BUSINESS

RESERVOIR STORAGE (1,000 AC. FT.)

		` '		
RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Antero Barr Lake Black Hollow Boyd Lake Cache La Poudr Carter Lake Chambers Lake Cheeseman Cobb Lake Eleven Mile Fossil Creek Gross Halligan Horsetooth Lake Loveland Lone Tree Mariano Marshall Marston Milton Standly Terry Lake Union Windsor	33.0 32.2 8.0 58.1 9.5 108.9 8.8 79.0 34.3 81.9 11.6 43.1 6.3 13.6 9.2 5.4 10.3 18.9 24.4 18.5 8.2	15.9 27.2 4.1 41.2 8.3 108.1 5.0 79.1 7.4 87.9 9.9 93.6 6.1 95.5 8.3 7.8 5.1 6.4 15.0 13.7 18.3 5.9	0 3.0 26.6 7.2 81.8 3.3 22.3 5.6 27.7 5.3 27.4 2.5 80.2 8.5 0.5 5.1 0.6 15.4 1.2 5.9 3.0 6.4 2.6	13.4 20.5 3.1 18.6 6.6 63.0 2.2 49.8 9.3 74.2 6.0 2.9 69.5 6.3 5.8 2.7 2.5 13.8 10.7 10.2 4.6 8.6

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACIT (INCHES)			AVERAGE (ALL PAST DATA)
Alpine Camp Beaver Dam Clear Creek Feather Guard Station Hoop Creek Hoosier Pass Kenosha Pass Laramie Road Two Mile	10/26 10/26 10/29 10/23 10/26 12/15 11/23 11/23 10/23 10/26	6.9 7.1 9.5 10.1 6.9 4.9 7.8 4.4 12.4 9.1	5.5 5.5 8.0 5.1 5.0 3.6 4.8 3.1 11.9 6.5	3.2 3.0 7.0 4.2 2.8 2.6 4.3 2.3 7.1 4.4	4.8 3.8 6.7 4.6 3.4 2.7 5.1 2.6 7.6 5.8

ALL PROFILES 4 FEET DEEP

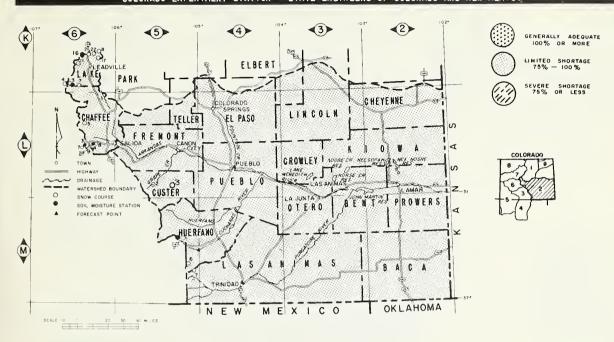
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ARKANSAS RIVER WATERSHED IN COLORADO

as of

March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The Arkansas Valley is very fortunate to have three times normal carry-over storage, because the spring and summer runoff will be much below normal. There are still two months to change this outlook, but it is doubtful if the deficiency can be overcome.

Snow pack over the entire drainage is 71% of normal. Some snow courses are approaching the minimum of record.

Reservoir storage is the highest in many years and this will be of great assistance this summer.

Soil moisture conditions in the mountains is also excellent.

Valley soils are also reported in good shape for spring planting.

Current forecasts are, based on normal precipitation for the remainder of the year. If this is the case forecasts indicate the Arkansas main stem will flow about 70% of the 1948-62 normal. The Purgatoire should flow about the same percentage.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

SNOW CURRENT INFORMATION PAST RECORD WATER CONTENT DATE SNOW WATER NO. CONTENT (INCHES) SNOW COURSE LAST YEAR AVERAGE SURVEY (INCHES) (INCHES) Arkansas River Bigelow Divide 5L3 2/25 19 2.9 5.3 2.9 Blue Lakes 5M6 2/24 12 1.9 Bourbon 5M5 2/25 8.0 6.7 23 4.6 Cooper Hill 6K23 8.8 30 2/27 6.4 Cucharas Pass 5M7 2/24 26 4.5 6.7 East Fork 5.5 6K17 2/25 12.1 8.4* 25 Four Mile Park 6K7 21 3.9 8.3 4.5 2/27 6K8 16.9 Fremont Pass 2/25 34 8.6 13.8 2/24 Garfield 6L8 38 9.3 16.7 LaVeta Pass (B) 5M1 11.1 8.5 8.3 2/24 34 Monarch Pass 6L4 2/24 38 9.2 18.6 15.6 St. Elmo (A) 6L5 7.0 10.8 10.7* 2/26 32 Tennessee Pass 6K2 13.7 8.7 34 2/27 6.4 Tomichi 6L7 2/24 30 7.4 15.0 Twin Lakes Tunnel 3/1 22 6.0 11.7 9.7 6K3 5L2 2/25 7.5 5.5* Westcliffe 25 5.7

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Adobe Creek	61.6	57.1	0	13.9
Clear Creek	11.4	11.2	10.4	5.4
Cucharas	40.0	0	0	5.3
Great Plains	150.0	65.2	0	45.3
Horse Creek	26.9	23.2	0	6.0
John Martin	366.6	375.5	2.7	77.7
Meredith	41.9	26.2	0	10.2
Model	15.0	3.9	0	2.6
Sugar Loaf	17.4	15.5	5.3	7.0
Twin Lakes	57.9	52.2	11.2	19.7

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	(INCHES)	THIS YEAR		VERAGE ALL PAST DATA)
Garfield King LaVeta Pass Leadville Twin Lakes Tunnel	11/9 11/9 12/8 11/15 11/15	6.7 3.3 11.9 7.8 4.5	6.1 3.0 10.6 5.6 3.6	4.7 2.3 6.1 5.2 3.0	3.3 1.8 7.0 3.9 2.1

ALL PROFILES 4 FEET DEEP

NOTE: • - 1948-62 (adjusted averages) NS - NO SURVEY (A) - AIR OBSERVED (B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Don W. McAndrew Soil Conservation Service Colorado State University Fort Collins, Colorado

STREAMFLOW FORECAST (1,000 AC. FT.)

A PRIL THROUGH SE	PTEMBER	_THIS	
STREAM I AND STATION	ORECAST APRIL - SEPT.		AVERAGE 1948-62
Arkansas at Pueblo (4) Arkansas at Salida (4) Cucharas near LaVeta Purgatoire at Trinidad	236 252 14 33	70 73 100 73	323 345 14 45

(4)Observed flow plus change in storage in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

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SOIL CONSERVATION SERVICE

Snow Survey Colorado State University Fort Collins, Colorado

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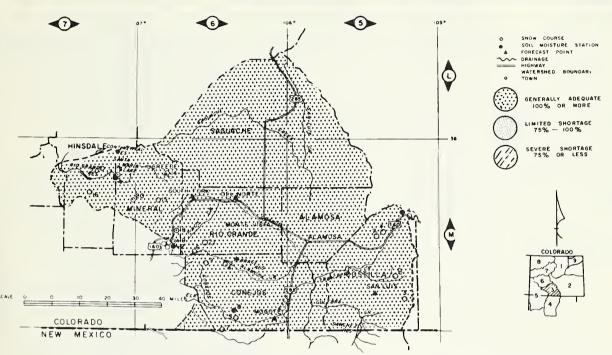
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UPPER RIO GRANDE WATERSHED IN COLORADO

as of

March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The snow pack in South Central Colorado is the best in the State. This, however, is not nearly as good as last year and only a little above normal.

Snow pack on the main stem of the Rio Grande is 111% of normal. Tributary streams, the Alamosa and Conejos have slightly better snow packs.

Reservoir carry-over storage is good and will assist farmers who are served by irrigation systems.

Mountain soils are wetter than usual and should increase summer streamflow to some extent.

Winter streamflow has been normal to slightly above.

Valley soils are in good condition.

Streamflow forecast range from 125% of normal on the Alamosa to 115% of normal on the Conejos. Additional snowfall is needed to insure above average streamflow this summer. About 3/4 of the snow season has now passed.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"
Issued By: Soil Conservation Service

F. A. Mark, State Conservationist, Colorado Benny Martin, Area Conservationist, Durango, Colorado

SNOW		CURRE	NT INFORM	ATION	PAST RE	CORD
SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CO (INCH LAST YEAR	ES)
Rio Grande in Colorado	61.5	0.404			5 3	1 04
Cochetopa Pass Hiway	6L6 6M19	2/24	20 66	3.0	5.7	4.9*
Lake Humphreys (A)	6M15	2/26	32	8.0	12.0	6.6*
Pass Creek	6M18	2/25	45	13.8	18.0	10.2*
Pool Table (A)	6M14	2/26	37	9.3	11.2	5.5*
Porcupine (A)	6M20	2/26	35	8.8	12.6	9.6*
Red Mountain Pass (B)	7M15	2/24	71	22.8	30.3	26.0*
Santa Maria	7M17 7M16	2/26	25 34	4.9 8.0	7.1	5.0 7.9
Upper Rio Grande Wolf Creek Pass	6M1	2/25	75	28.9	34.5	25.6
Wolf Creek Summit (B)	6M17	2/25	81	29.6	34.6	23.2
Alamosa River						
Silver Lakes	6M4	2/28	31	5.5		6.6
Summitville (A)	6M6	2/26	63	21.4	21.0	15.5
Conejos River						
Cumbres Pass (A)	6M7	2/26	64	23.0	25.2	17.0
Platoro (A)	6M9	2/26	57 22	18.2	21.0	13.5*
River Springs	6M5	2/28	22	5.3	11.0	7.1
Sangre De Cristo Range		0.404	10			
Blue Lakes (B)	6M6 5M7	2/24	12 26	1.9 4.5	2.9 6.7	
Cucharas Pass (B) Culebra (A)	6M3	2/26	39	9.4	10.4	8.5
LaVeta Pass	5M1	2/24	34	8.3	11.1	8.5

NOTE: * - 1948-62 (adjusted averages)

NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62
Continental	26.7	8.9	1.3	5.4
Platoro	60.0	17.3	2.7	
Rio Grande	45.8	36.3	5.8	13.0
Sanchez	103.2	15.2	4.7	10.2
Santa Maria	45.0	18.1	2.8	6.8
Terrace	17.7	10.8	1.8	3.0

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	(INCHES)			AVERAGE (ALL PAST DATA)
Alberta Park	12/8	8.2	8.2	5.9	4.8
Bristol View	11/24	6.1	4.9	3.5	4.4
LaVeta Pass	12/8	11.9	10.6	6.1	7.0
Mogote	12/7	10.7	6.7	5.0	5.3

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

		_ THIS	
STREAM AND STATION	FORECAST APRIL - SEPT.	YEAR % AVERAGE	AVERAGE 1948-62
			$\overline{}$
Alamosa above Terrace Conejos near Mogote Culebra at San Luis (6) Rio Grande at 30 Mile	85 225 26	125 115 124	68 196 21
Bridge (5) Rio Grande nr Del Norte	156	118	132
(5) South Fork at South Fork	575 150	117 123	492 122

Soil Conservation Service Colorado State University Fort Collins, Colorado

This Report Prepared by Jack N. Washichek and Don W. McAndrew

> (5) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoir. (6) Observed flow plus changes in storage in Sanchez Reservoir.

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SOIL CONSERVATION SERVICE

Snow Survey Colorado State University Fort Collins, Colorado

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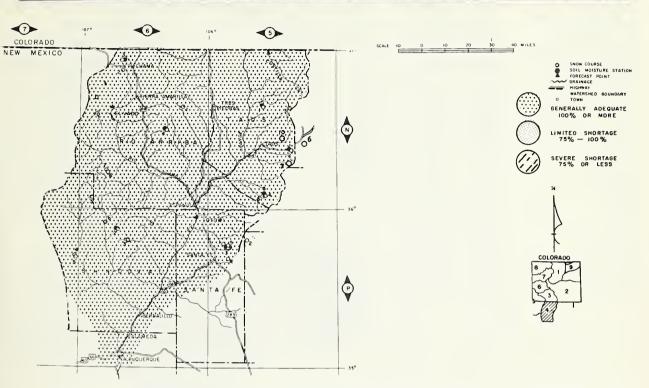
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RIO GRANDE WATERSHED IN NEW MEXICO

as of

March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The Rio Grande should have above normal runoff this summer if spring snowfall is at least normal. Current readings indicate snow pack is 114% of the 15 year average. Snowfall in the Upper Basin in Colorado is slightly better than New Mexico, but both areas are above normal.

Reservoir carry-over storage is slightly better than normal and will be a good supplemental supply for farmers and ranchers served by them.

Soil moisture is good in the mountain areas and the plains are reporting fair to good conditions.

Forecasts are based on normal precipitation for the remainder of the year. These forecasts show the main stem of the Rio Grande should flow 135% of normal, Chama 98% of normal, the Pecos 140% of normal and the Rio Hondo and Red River near normal.

Additional snow is needed to insure these runoffs.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"
Issued By: Soil Conservation Service

Einar L. Roget, State Conservationist, Albuquerque, New Mexico Walter B. Rumsey, Area Conservationist, Santa Fe, New Mexico

SNOW		CURREN	T INEORMA	TION	PAST RI	
· SNOW COURSE	NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CO (INC) LAST YEAR	
Rio Grande (Colorado) Culebra (A Cumbers Pass (A LaVeta Pass Platoro (A River Springs Santa Maria Silver Lakes Summitville (A Upper Rio Grande Wolf Creek Pass Aspen Grove (New Mex Bateman Big Tesuque Blue Bird Mesa Capuline Peak Chama Divide Chamita Cordova (A Elk Cabin Fenton Hill Hematite Park Mora View Pajarito Peak Panchuela Payrole Philmont Quemazon Red River Rio En Medio Sandavol Taos Canyon Tres Ritos Twinning	6M7 5M1 6M9 6M5 7M17 6M4 6M6 7M16 6M1 5P1 6N4 5P3 6P6 6N6 6N2 6N8 6N9 6N9 6P2 5N3 5N7 6P4 6P4 5P2	2/26 2/26 2/24 2/26 2/28 2/28 2/25 NS 2/25 2/25 2/24 2/25 2/24 2/24 2/24 2/24	39 64 34 57 22 25 31 63 34 75 37 30 29 20 22 37 39 12 28 22 9 8 24 34 40 25 41 29 22 24 24	9.4 23.0 8.3 18.2 5.3 4.9 5.5 21.4 8.0 28.9 9.1 7.1 5.8 4.4 4.4 4.4 4.2.0 1.8 5.3 8.8 8.5 5.0 11.0 6.7 4.6 10.6	10.4 25.2 11.1 21.0 11.0 7.1 21.0 11.2 34.5 7.9 9.4 8.9 6.6 12.3 12.6 5.3 6.7 5.8 5.0 2.7 5.9 10.2 11.7 8.0 13.1 6.3 9.2 	8.5 17.0 8.5 13.5 7.1 5.0 6.6 15.5 7.9 25.6 4.5 9.8* 4.5

NOTE:	*	-	1948-62 (adjusted averages)	
	NS	-	NO SURVEY	

(A) - AIR OBSERVED (B) - ON ADJACENT DRAINAGE

Rio Grande at San Marcial is Forecast at 83 $_\%$ of the Elephant Butte Irrigation District's normal.

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DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey Colorado State University Eort Collins, Colorado

OFFICIAL BUSINESS

This Report Prepared by Jack N. Washichek and Don W. McAndrew Soil Conservation Service Colorado State University Fort Collins, Colorado RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEA AVERAGE 1948-62
Alamorgordo Caballo Conchas Elephant Butte El Vado McMillan-Avalor Red Bluff (Tex)		55.0 83.7 259.7 537.7 2.0 9.4 51.6	25.0 13.2 3.2 154.9 2.4 3.0 20.2	75.9 116.7 239.4 389.1 17.2 17.8 71.8

MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION		CAPACITY (INCHES)	THIS		AVERAGE ALL PAST DATA)
Bristol View Mogote New Mexico Aqua Piedra Bateman Big Tesuque Chamita Fenton Hill Red Summit	12/8 11/24 12/7 10/21 11/2 11/15 10/21 10/29 11/2 10/29	8.2 6.1 10.7 7.2 6.7 3.7 8.0 6.5 4.8 3.5 3.3	8.2 4.9 6.7 4.6 3.7 5.0 4.2 1.7 3.5 2.3	5.9 3.5 5.0 2.4 0.5 2.4 2.2 1.5 0.6 1.7	4.8 4.4 5.3 3.5 2.2 1.2 2.0 2.5 1.1 2.3

ALL PROFILES 4 EEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.)

STREAM AND STATION	APRIL - SEPT.		AVERAGE 1948-62
Costilla at Costilla (8) Pecos at Pecos Rio Chama nr La Puenta Rio Grande at Otowi (7)® Rio Grande at San Marcial (7)® Rio Hondo nr Valdez Red River at Questa®®	20	80	25
	75	142	53
	210	98	214
	825	135	609
	572	135	424
	18	100	18
	23	92	25

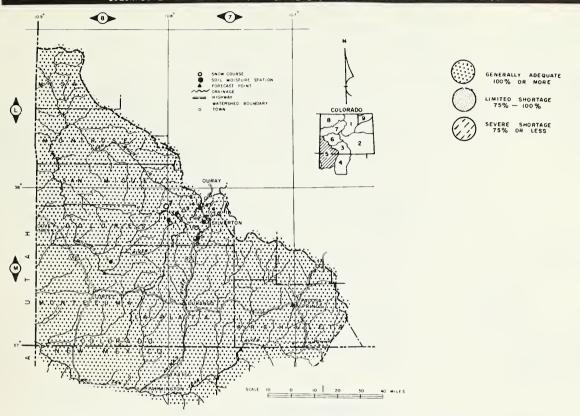
- (7) Observed flow plus changes in storage in El Vado and Abiquiu Reservoirs.
- (8) Observed flow plus changes in storage in Costilla Reservoir.
- Rio Grande at Otowi and Rio Grande at San Marcial, Forecast and Average are March -July inclusive.
- Red River at Questa Forecast and Average April July inclusive.

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SAN MIGUEL - DOLORES - ANIMAS - SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The general water supply outlook for the San Juan, Animas and Dolores Drainages is good.

The snow has not quite kept pace with the early season, but is still above normal in all three drainages.

The San Juan's snow pack is 117% of normal while the Animas and Dolores is 103% of normal.

Carry-over in the basins major reservoirs is excellent and will be a good supplement for summer streamflow. High elevation soils are wet and valley soils are reported to be in excellent condition.

All the streams in the basin are expected to flow better than normal this summer. None of the forecasts are extremely high, but none are below average. The San Juan should flow about 125% of normal, while other streams in the area should flow slightly lower. Current streamflow is about normal. Snowfall must continue for the next 2 months to guarantee average streamflow this summer

'THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist,
Colorado
Benny Martin, Area Conservationist,
Durango, Colorado

Einar L. Roget, State Conservationist,
Albuquerque, New Mexico
Walter B. Rumsey, Area Conservationist,
Santa Fe, New Mexico

Dearl Beach, Area Conservationist, Grand Junction, Colorado

SNOW CURRENT INFORMATION PAST RECORD WATER SNOW DEPTH WATER CONTENT SNOW COURSE LAST YEAR SURVEY (INCHES (INCHES) San Juan River 4.2 (B) 6N2 6.6 Chama Divide 2/25 22 5.6 9.0 Chamita (B) 6N3 2/25 37 10.0 12.3 6M3 2/25 36.8 28.2 Upper San Juan 31.8 84 6M1 34.5 25.6 Wolf Creek Pass (B) 2/25 75 28.9 Wolf Creek Summit 6M17 2/25 29.6 34.6 23.2 81 Animas River 11.9 Cascade 7M5 2/24 41 12.8 12.7 9.7* Howardville 7M13 2/24 13.9 39 11.2 12.3 Ironton Park (B) 7M6 2/25 36 9.5 13.2* Mineral Creek 7M14 2/24 44 11.5 17.9 15.5 12.7* 7M12 2/24 43 Molas Lake 13.5 30.3 26.0* Red Mountain Pass 6M19 2/24 71 22.8 Silverton Sub-Station 7M4 2/24 35 9.7 9.3 5.6 7M11 2/24 24.2 27.1 21.7* Spud Mountain 62 Dolores River 17.8 13.2 Lizzard Head 7M3 2/25 50 15.5 9.7 8.0 Rico 7M1 2/25 31 8.2 Telluride 7M2 2/24 24 5.8 7.9 6.7 2/24 15.8 11.5* 7M9 40 11.0 Trout Lake

RESERVOIR STORAGE (1,000 AC, FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62			
Groundhog Navajo Vallecito	21.7 1036.0 126.3	18.5 216.5 74.9	6.8 265.0 35.5	6.0			
MEASURED FIRST OF MONTH							

SOIL MOISTURE

STATION		CAPACITY (INCHES)		LAST	VERAGE ALL PAST DATA)
Cascade	11/26	9.1	7.6	5.3	6.7
Dolores	11/10	19.6	9.8	0.5	4.3
Lizzard Head	11/10	11.8	8.3	9.9	8.2
Mineral Creek	11/26	5.7	4.8	3.9	3.6
Molas Lake	11/26	9.4	7.9	3.9	4.2
Rico	11/10	13.8	13.5	13.1	9.1

ALL PROFILES 4 FEET DEEP

NGTE: * - 1948-62 (adjusted averages) NS - NO SURVEY (A) - AIR OBSERVED (B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Don W. McAndrew Soil Conservation Service Colorado State University Fort Collins, Colorado

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPTEMBER FORECAST YEAR AVERAGE AND STATION APRIL - % SEPT. AVERAGE 120 456 Animas at Durango Dolores at Dolores 300 115 260 125 27 La Plata at Hesperus 34 220 Los Pinos at Bayfield (9) 300 135 Piedra Creek nr Piedra 230 126 132

San Juan at Rosa (9)

OBSERVED FLOW PLUS CHANGES IN STORAGE IN VALLECITO RESERVOIR

750

125 597

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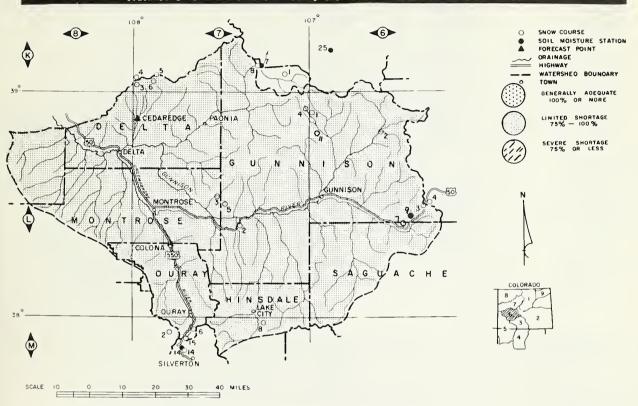
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GUNNISON RIVER WATERSHED IN COLORADO

as of

March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



Water supplies should be adequate on the Gunnison this summer, however, snowfall is slightly below normal. Snowfall on the main stem of the Gunnison now stands at 93% of normal, however, there are still a couple of months left in which this could increase. The Grand Mesa area of the drainage is above normal, but the headwaters area is considerably below.

Soil moisture conditions in the high mountain areas are good, which will help increase the spring runoff.

Taylor Reservoir contains 80,000 acre feet of water compared to a normal of 56,600 acre feet and last years 73,000 acre feet.

Forecasts are based on precipitation being normal for the remainder of the year. If this be the case the Gunnison should flow about 1,350,000 acre feet or 103% of normal.

The Uncompanger should flow 94% of the 1948-62 average and Surface Creek should flow 105% of average. Current streamflow is about normal.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist, Colorado Dearl Beach, Area Conservationist, Grand Junction, Colorado

SNOW RESERVOIR STORAGE (1,000 AC. FT.) CURRENT INFORMATION PAST RECORD WATER WATER CONTENT DATE SNOW 15 YEAR SNOW COURSE NO DEPTH LAST YEAR USABLE RESERVOIR AVERAGE 1948-62 LAST YEAR AVERAGE CAPACITY YEAR Gunnison River Alexander Lakes (A) 7K3 2/27 64 18.6 19.0 17.8 Taylor 106.2 73.3 56.6 80.0 2/17 2/25 Black Mesa 7L5 50 14.5 Blue Mesa 7L2 30 6.5 7.6 6.5 6L11 2/25 41 18.9 Butte 11.6 2/24 2/25 4.9 Cochetopa Pass 6L6 20 3.0 5.7 Crested Butte 6**L1** 40 9.8 16.3 12.1 2/25 Keystone 7L3 48 14.1 26.8 2/26 2/18 2/25 Lake City 7M8 29 5.0 9.4 8.0 Long Gulch 7L4 32 8.4 14.6 14.3 Mesa Lakes (B) 7K4 49 14.9 6L4 2/24 7K8 2/27 7M14 2/24 (B) 9.2 18.6 15.6 38 Monarch Pass McClure Pass (A) 52 17,7 18.2 15.59 MEASURED FIRST OF MONTH (B) 44 11.5 17.9 13.2 Mineral Creek 2/27 2/24 (A)(B) 41 13.9 17.0 13.7 North Lost Trail 7K1 SOIL MOISTURE Park Cone 6L2 33 7.8 13.7 9.7 22.3 OF CAPACITY SURVEY (INCHES) LAST AVERAGE Park Reservoir 2/27 72 19.3 21.1 (A) 7K6 THIS YEAR (ALL PAST DATA) STATION 2/24 40 17.4 Porphyry Creek 6L3 10.7 14.5 2/24 Tomichi 6L7 30 7.4 19.8 Trickle Divide (A)(B) 7K5 80 24.8 15.0 22.5 Grand Mesa 11/10 12.5 12.5 9.0 3.3 5.7 3.0 1.8 11/9 2.3 King 11/26 3.9 Mineral Creek 4.8 3.6 Uncompangre River 5.1 Ironton Park 7M6 2/25 36 9.5 12.3 10.7 Placita 12/7 9.3 8.4 3.9 2/25 17.8 Lizzard Head 7M3 50 15.5 13.2 Lone Cone 7M7 45 12.6 13.7 7M15 2/24 Red Mountain Pass (B) 71 22.8 30.3 26.0* 2/24 6.7 Telluride 7M2 24 5.8 7.9 Trout Lake 7M9 40 11.0 15.8 11.59

ALL PROFILES 4 FEET DEEP

NOTE: * - 1948-62 (adjusted averages)

NS - NO SURVEY

(A) - AIR OBSERVED

(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Don W. McAndrew Soil Conservation Service Colorado State University Fort Collins, Colorado

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SET	PTEMBER	THIS _	
STREAM AND	APRIL -		AVERAGE
STATION	SEPT.		1948-62
Gunnison nr Grand Jct.	1350	103	1305
Surface Creek nr Cedaridg	e 18	105	17
Uncompahgre at Colona	130	94	139

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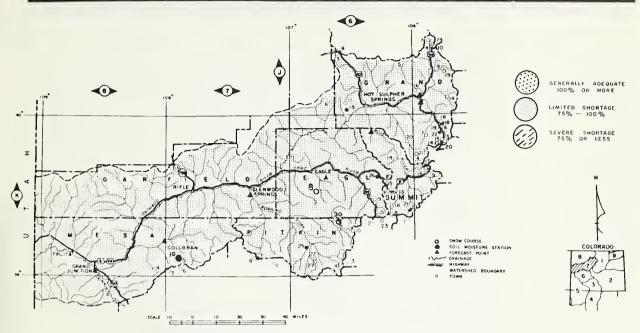
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COLORADO RIVER WATERSHED IN COLORADO

as of March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The snow pack in the headwaters of the Colorado is poor. Current snow readings indicate only about 70% of normal and only 55% of last year at this time. The Roaring Fork is in better shape with 89% of the 15 year normal while the Grand Mesa area has 106% of average snow.

If snowfall remains average for the rest of the season the Colorado as a whole should flow about 80% of normal.

Of some help is the rather good high elevation soil moisture conditions. This will tend to increase summer runoff. Carry-over storage is considerably up from last year and slightly above normal.

The Roaring Fork should flow nearly normal this summer and Plateau Creek should produce slightly better than normal flow.

Valley soils are reported in good condition.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist, Colorado Dearl Beach, Area Conservationist, Grand Junction, Colorado

J. L. Hall, Area Conservationist, Glenwood Springs, Colorado

SNOW				NT INFORM.		PAST RI WATER CO	
SNOW COURSE		NO.	DATE	SNOW DEPTH	WATER	(INCH	ES)
SACW COURSE		NO.	SURVEY	(INCHES)	(INCHES)	LAST YEAR	AVERAGE 1948-62
Colorado River Arrow Berthoud Pass Berthoud Summit Blue River Cooper Hill Fiddlers Gulch Fremont Pass Frisco Glen Mar Ranch Gore Pass Granby Grand Lake Grizzly Peak Hoosier Pass Jones Pass Lake Irene Lapland Lulu Lynx Pass McKinzie Gulch Middle Fork Campgn Milner Monarch Lake North Inlet to Gra Pando Phantom Valley Ranch Creek Shrine Pass Snake River Summit Ranch Tennessee Pass Vasquez Creek Willow Creek Willow Creek		5K6 5K3 5K14 6K21 6K23 6K5 6K8 6N3 6K20 6J11 5J16 5J19 5K9 5K1 5J7 6J6 6K1 5J14 5J14 5J14 5J14 5J14 5J14 5J14 5J1	2/25 2/25 2/28 2/27 EST. 2/25 3/1 2/24 2/23 2/23 2/23 2/25 EST. 2/24 8 2/25 2/25 EST. 2/24 NS 2/25 2/23 2/24 NS 2/25 2/23 2/24 NS 2/25 2/27 2/28 2/27 2/28 2/27 2/28 2/28 2/28	35 40 35 22 30 30 30 26 23 25 28 37 29 37 55 24 39 30 23 30 23 30 25 24 39 27 28 28 37 29 37 41 29 21 21 21 21 21 21 21 21 21 21 21 21 21	7.6 9.4 9.2 4.2 6.4 8.6 5.2 5.6 5.0 8.6 5.3 16.5 9.5 7.3 7.4 4.3 5.5 9.5 7.3 6.4 8.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9	11.5 14.5 16.5 11.2 8.8 17.8 16.9 9.4 6.3.5 10.2 10.5 19.4 17.1 13.8 24.0 10.5 16.8 13.0 6.5 9.9 11.5 11.4 10.6 12.9 8.3 17.0 10.7 9.0 10.7	9.5 12.2 16.5* 7.5* 14.9 13.8 7.5* 7.0 11.1 10.9* 20.0 11.0 11.0 10.0 14.2 10.8 10.7 8.0 7 8.0 7 8.3 9.1* 9.1* 9.2 7.5* 14.6 10.7 10.9 10.0 10.0 11.0 10.0 10.0 10.0 10.0
Roaring Fork River Aspen Independence Pass Ivanhoe Lift McClure Pass Nast North Lost Trail	Tunnel	7J22 6K4 6K10 7K27 7K8 6K6 7K1	2/25 3/1 2/27 2/25 2/27 2/27 2/24 2/27	41 40 48 40 52 22 41	10.8 11.3 9.3 11.3 17.7 3.8 13.9	18.5 16.2 17.0 19.9 18.2 6.9	14.9 15.6 13.9* 15.5* 6.3 13.7
Plateau Creek Alexander Lake Mesa Lakes Park Reservoir Trickle Divide	(A)(B) (A)(B) (A)	K3 K4 K6 K5	2/27 2/25 2/27 2/27	64 49 72 80	18.6 14.9 22.3 24.8	19.0 14.6 19.3 19.8	17.8 14.3 21.1 22.5

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

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RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAG 1948-62		
Granby	465.5	232.3	72.1	201.4		
Green Mountain	146.9	80.7		73.9		
Vega	32.9	20.7				
Williams Fork	96.8	26.3				
Dillon	254.0					
SOIL MOISTURE						

STATION		CAPACITY (INCHES)		LAST YEAR	(ALL PAS DATA)
Berthoud Pass	12/10			2.5	2.6
Blue River	11/23	4.2	3.5	2.6	2.7
Gore	11/9	4.9	3.1	2.1	2.5
Grand Mesa	11/10	12.5	12.5	9.0	
Muddy Pass	11/3	11.1	7.4	6.1	6.4
Placita	12/7	9.3	8.4	3.9	5.1
Ranch Creek	12/10	8.7	6.3	5.6	6.2
Vail	12/29	12.3	8.6	4.3	7.4
Vasquez Sipho	h12/13	11 0	7 7	6 8	7 4

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (1,000 AC. FT.) APRIL THROUGH SEPTEMBER THIS

STREAM AND STATION	APRIL - SEPT.		AVERAGE 1948-62
Blue River abv. Green	•		1
Mt. (10)	190	70	274
Colo. River nr Granby	195	84	233
Colo. River aby Glenwood	193	04	233
Springs (12) Roaring Fork at Glenwood	1200	77	1556
Springs (14)	762	100	762
Williams Fork nr Parshal	1		1
(15)	55	71	77
Willow abv Willow Cr.	41	85	48
Colo. nr Cameo (12)	2050	93	2213

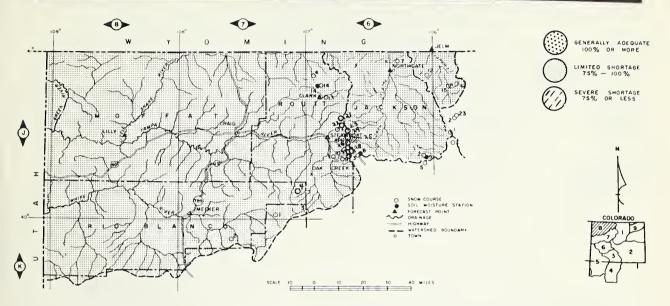
- (10) Observed flow plus change in storage in Dillon Reservoir.
- (11) Observed flow plus diversions by Adams Tunnel and Grand River Ditch plus change in storage in Granby Reservoir.
- (12) Observed flow plus the changes as indicated in (11) plus Moffat Ditch.
 (14) Observed flow plus diversions through
- Twin Lakes Tunnel.
- (15) Observed flow plus diversions through Jones Pass Tunnel.

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U.S. DE PARTMENT OF AGRICULTURE

YAMPA, WHITE, AND NORTH PLATTE RIVERS WATERSHEDS IN COLORADO

as of March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The North Platte, Yampa and White River Watersheds have a less than normal snow pack, but spring and summer flows should be adequate.

The snow pack on the North Platte and Yampa are about 75% of normal while the White Watershed has about 90% of the 1948-62 average.

Soil in the mountain areas is wetter than most years and should increase the runoff to some extent.

Valley soils are reported in good condition over the entire area.

Current streamflows are near normal.

Forecasts for streams in this area vary from 90% of normal on the White to 75% on the Little Snake.

The Yampa should flow about 77% of average if the precipitation is near average for the rest of the season.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

SNOW			CURRE	NT INFORM	ATION	PAST RI	CORD
SNOW COURSE		NO.	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER C (INC LAST YEAR	ONTENT HES)
North Platte River Cameron Pass Columbine Lodge Deadman Hill McIntyre Northgate Park View Roach Willow Creek Pass	(A) (A)(B) (B) (A) (B)	5J1 6J3 5J6 5J15 6J7 6J2 6J12 6J5	2/24 2/25 2/23 NS 2/24 2/25 2/23 2/25	48 50 46 19 27 39 34	15.2 14.0 12.0 3.9 6.3 10.5 8.9	20.5 25.3 15.2 - 6.6 10.6 18.6 11.9	19.2 20.5 12.9 5.6* 7.9 16.2
Yampa River Bear River Clark Columbine Lodge Dry Lake Elk River Hahn's Peak Lynx Pass Rabbit Ears Yampa View	(A) (B) (A) (A) (B)	7J3 6J13 6J3 6J1 6J4 6J14 6J6 6J9 6J10	NS 2/22 2/25 2/22 2/22 NS 2/23 2/25 2/25	33 50 55 46 30 57 37	8.9 14.0 15.4 12.4 7.0 17.2 10.0	16.8 25.3 19.8 22.4 13.0 24.2 15.2	20.5 18.5 15.9 10.8 24.9 13.8*
White River Burro Mountain Rio Blanco	(A)	7K2 7J1	2/27 2/24	51 30	13.3 13.0	19.0 18.7	15.7 13.6

SOIL MOISTURE

STATION	DATE OF SURVEY	(INCHES)	THIS YEAR	LAST YEAR	AVERAGE (ALL PAST DATA)
Hahn's Peak Laramie Road Muddy Pass Two Mile Willow Pass	11/3 10/23 11/3 10/26 11/19	11.1 9.1	11.0 11.9 7.4 6.5 8.4	8.9 7.1 6.1 4.4 5.7	7.6 6.4 5.8 6.8

ALL PROFILES 4 FEET DEEP

STREAMFLOW FORECAST (L000 AC. FT)

APRIL THROUGH SEPTEMBER THIS						
STRE AM AND STATION	FORECAST APRIL -	YEAR	AVERAGE 1948-62			
Elk at Clark	170	83	205			
Laramie at Jelm	100	89	112			
Little Snake at Lilly	240	75	321			
White at Meeker	300	90	332			
Yampa at Maybell	710	77	923			
Yampa at Steamboat Spr.	250	96	292			

NOTE: • - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVED
(B) - ON ADJACENT DRAINAGE

This Report Prepared by Jack N. Washichek and Don W. McAndrew Soil Conservation Service Colorado State University Fort Collins, Colorado

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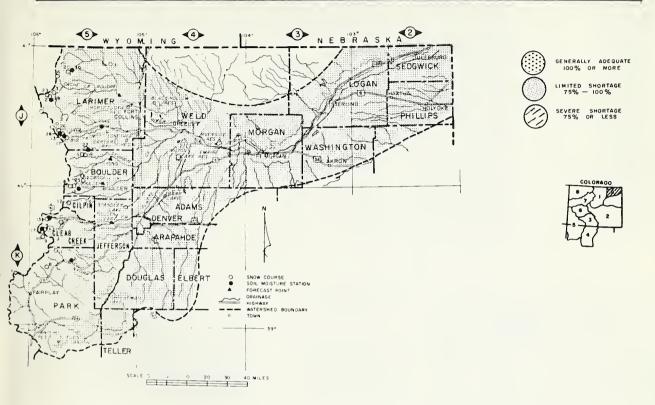
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LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO as of

March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The South Platte and its' tributaries are far behind on their high elevation snow pack. Current snow readings indicate the pack is only 53% of last year and only 05% of the 1948-62 normal. There are a couple of months left in which to bring the snow pack up to normal, but it is doubtful if this is attained.

The total water supply outlook is not quite so bad, primarily due to the above average carry-over storage.

Irrigators that have reservoir storage to back them up this summer, should have a near normal water supply.

Farmers relying on river runs will have some short water supplies.

Soils in the mountains are wet, which should increase the runoff slightly.

Forecasts are based on average precipitation for the remainder of the year.

The Lower South Platte River will flow below normal this season. Tributary streams are forecast from 75-85% of average.

"THE CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY"

Issued By: Soil Conservation Service

F. A. Mark, State Conservationist, Colorado Wallace L. Bruce, Area Conservationist Sterling, Colorado

SNOW CURRENT INFORMATION PAST RECORD WATER CONTENT SNOW DATE WATER SNOW COURSE NO. OF SURVEY DEPTH CONTENT (INCHES) LAST YEAR AVERAGE (INCHES) (INCHES) South Platte River & Tributaries 8altimore 5K23 2/28 16 3.2 6.5 13.0* 8erthoud Falls 5K13 2/28 35 9.2 15.0 5J3 3.7 2.5 8ig South 2/26 7 1.3 14.5 9.9* 8oulder Falls 5J25 2/27 27 7.4 5J1 20.5 19.2 Cameron Pass (A) 2/24 48 15.2 7.8 5J2 10.2 Chambers Lake 2/26 17 4.3 4.5* 5J18 Copeland Lake 2/25 10 2.4 5.6 Deadman Hill (A) 5J6 2/23 12.0 15.2 12.9 46 5J17 5.0 4.7* Deer Ridge 2/24 13 3.4 6.5* 7.4 Empire 5K10 2/28 27 4.6 5K11 3.7* Geneva Park 2/28 10 2.1 5K9 19.4 15.0 (8) Grizzly Peak 2/28 37 8.8 Hidden Valley 5J13 2/24 26 5.9 10.0 9.4 Hoosier Pass 6K1 2/25 29 5.6 17.1 11.1 5J11 7.7 6.0 17 2/25 3.3 Hour Glass Lake 8.0* 11.3 Jefferson Creek 5K8 2/25 25 5.1 (8) 5J10 55 24.0 20.0 EST. 16.5 Lake Irene 12.5 5J22 9.8* Long's Peak 2/27 28 6.1 Lost Lake 5J23 2/28 24 5.9 12.2 10.8* Loveland Lift NO. 1 Loveland Pass 5K24 53 15.9 2/28 13.8 13.1 23.5 5.15 2/28 36 8.8 2.0 Pine Creek 5J31 2/25 6 1.2 6.5* 5J10 2/25 6.6 Red Feather 15 3.2 12.6* 5J26 2/24 33 8.3 14.5 Two Mile 19.4 17.6 University Camp 5J8 2/27 34 8.7 5J21 2/25 15 2.9 7.1 5.4* Ward 7.6 35 14.2 11.9 5J5 EST. Wild 8asin

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY

This Report Prepared by Jack N. Washichek and Don W. McAndrew Soil Conservation Service Colorado State University Fort Collins, Colorado

(A) - AIR OBSERVED (B) - ON ADJACENT DRAINAGE

STREAMFLOW FORECAST (1,000 AC. FT.)

APRIL THROUGH SEPT	PEMBER	THIS _	
STREAM I AND STATION	APRIL -	YEAR % VERAGE	AVERAGE 1948-62
Big Thompson at Drake (2) Boulder at Orodell Cache La Poudre at Canon	90 44	81 81	110 54
Mouth (1) Clear Creek at Golden (3) Saint Vrain at Lyons	200 115 55	81 85 69	246 134 80

- (1) Observed flow minus diversions from Michigan, Colorado and Laramie rivers, plus diversions for irrigation and municipal use above station.
- (2) Observed flow plus by-pass to power plants.
- (3) Observed flow minus diversions through Jones Pass.

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UNITED STATES

DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Snow Survey Colorado State University Fort Collins, Colorado

OFFICIAL BUSINESS

RESERVOIR STORAGE (1,000 AC. FT.)

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVERAGE 1948-62				
Carter Cheeseman Eleven Mile Empire Horsetooth Jackson Julesburg Point of Rocks Prewitt Riverside	108.9 79.0 81.9 37.7 143.5 35.4 28.2 70.0 32.8 57.5	108.1 79.1 87.9 24.4 95.5 30.5 20.1 65.6 22.6 47.0	81.8 22.3 27.7 22.4 80.2 31.3 21.2 29.8 0 31.3	63.0 49.8 74.2 27.4 69.5 30.6 20.6 51.8 18.0				
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MEASURED FIRST OF MONTH

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACITY (INCHES)		LAST YEAR	AVERAGE (ALL PAST DATA)
Alpine Camp 8eaver Dam Clear Creek Feather Guard Station Hoop Creek Hoosier Pass Kenosha Pass Laramie Road Two Mile	10/26 10/26 10/29 10/23 10/26 12/15 11/23 10/23 10/26	6.9 7.1 9.5 10.1 6.9 4.9 7.8 4.4 12.4 9.1	5.5 5.5 8.0 5.1 5.0 3.6 4.8 3.1 11.9 6.5	3.2 3.0 7.0 4.2 2.8 2.6 4.3 2.3 7.1 4.4	3.4 2.7

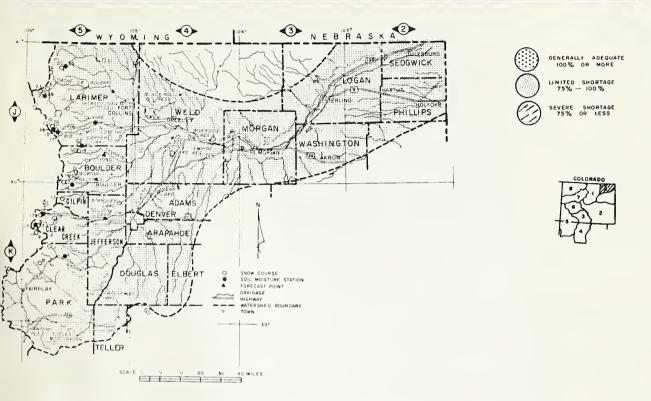
ALL PROFILES 4 FEET DEEP

POSTAGE AND FEES PAID U.S. DEPARTMENT OF AGRICULTURE

LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO as of

March 1, 1966

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION - STATE ENGINEERS OF COLORADO AND NEW MEXICO



The South Platte and its' tributaries are far behind on their high elevation snow pack. Current snow readings indicate the pack is only 53% of last year and only 65% of the 1948-62 normal. There are a couple of months left in which to bring the snow pack up to normal, but it is doubtful if this is attained.

The total water supply outlook is not quite so bad, primarily due to the above average carry-over storage.

Irrigators that have reservoir storage to back them up this summer, should have a near normal water supply.

Farmers relying on river runs will have some short water supplies.

Soils in the mountains are wet, which should increase the runoff slightly.

Forecasts are based on average precipitation for the remainder of the year.

The Lower South Platte River will flow below normal this season. Tributary streams are forecast from 75-85% of average.

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SNOW		CURRE	NT INFORM	ATION		RECORO
SNOW COURSE	NO.	DATE OF SURVEY	SNOW OE PTH (INCHES)	WATER CONTENT (INCHES)	WATER O	HES)
South Platte River & Tributaries Baltimore Berthoud Falls Big South Boulder Falls Cameron Pass (A) Chambers Lake Copeland Lake Deadman Hill (A) Deer Ridge Empire Geneva Park Grizzly Peak (B) Hidden Valley Hoosier Pass Hour Glass Lake Jefferson Creek Lake Irene (B) Long's Peak Lost Lake Loveland Lift NO. 1 Loveland Pass Pine Creek Red Feather Two Mile University Camp Ward Wild Basin	5K23 5K13 5J25 5J1 5J25 5J18 5J17 5K10 5K11 5K11 5K11 5K11 5K24 5J23 5K24 5J23 5K24 5J3 5J20 5J26 5J35 5J26 5J35	2/23 2/24 2/28 2/28 2/28 2/24 2/25 2/25 2/25 2/25 2/25 2/27 2/27	16 35 7 27 48 17 10 46 13 27 10 37 26 29 17 25 55 52 28 24 53 36 6 15 33 34 15 35	3.2 9.2 1.3 7.4 15.2 4.3 2.4 12.0 3.4 4.6 2.1 8.8 5.9 5.6 3.3 5.1 16.5 5.9 13.8 8.8 1.2 8.3 8.7 2.9 7.6	6.5 15.0 3.7 14.5 20.5 10.2 5.6 15.2 5.0 7.4 6.3 19.4 10.0 17.1 7.7 11.3 24.0 12.5 12.2 15.9 23.5 2.0 6.6 14.5 19.4 7.1	13.0* 2.5 9.9* 19.2 7.8 4.5* 12.9 4.7* 6.5* 3.7* 15.0 9.4 11.1 6.0 8.0* 20.0 9.8* 10.8* 13.1 6.5* 12.6* 17.6 5.4* 11.9

NOTE: * - 1948-62 (adjusted averages)
NS - NO SURVEY
(A) - AIR OBSERVEO
(B) - ON AOJACENT ORAINAGE

This Report Prepared by Jack N. Washichek and Don W. McAndrew Soil Conservation Service Colorado State University Fort Collins, Colorado

STREAMFLOW FORECAST (1,000 AC. FT.)

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STREAM FOR ANO STATION	APRIL -	YEAR % VERAGE	AVERAGE 1948-62
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DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE Snow Survey

Colorado State University Fort Collins, Colorado RESERVOIR STORAGE (1,000 AC. FT.)

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MEASUREO FIRST OF MONTH								

SOIL MOISTURE

STATION	DATE OF SURVEY	CAPACIT (INCHES)			AVERAGE (ALL PAST OATA)
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ALL PROFILES 4 FEET DEEP

POSTAGE ANO FEES PAIO U.S. OF PARTMENT OF AGRICULTURE

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

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Forest Service Soil Conservation Service

Department of Interior

Bureau of Reclamation Geological Survey National Park Service Indian Service

Department of Commerce

Weather Bureau

War Department

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Colorado Public Service Company Public Service Company of New Mexico

MUNICIPALITIES

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City of Greeley
City of Boulder
City of Fort Collins

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Arkansas Valley Ditch Association Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company San Luis Valley Irrigation District Santa Maria Reservoir Company Costilla Land Company Uncompangre Valley Water Users' Association Twin Lakes Reservoir and Canal Company Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

SNOW SURVEY UNIT

AG. ENGINEERING SHOP COLORADO STATE UNIVERSITY FORT COLLINS, COLORADO 80521

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COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Surrey"

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